

REMARKS

Claims 1-16 are pending. Claims 1, 4, 5, and 6 have been amended. Support for the amendment to Claim 1 can be found at least on page 9 lines 4-14 of the Specification. Dependent Claims 4 and 5 have each been amended to properly identify a base claim. Support for the amendment to Claim 6 can be found at least on page 8, lines 15-24 of the Specification. The amendments do not add new matter.

REJECTIONS UNDER 35 U.S.C. § 101 – STATUTORY DOUBLE PATENTING

The present application is a continuation of USPN 6,318,854. The Examiner rejected Claims 1-16 under Section 101 as being drawn to identical subject matter as the invention covered by Claims 2 and 3 in '854 patent. A reliable test for double patenting involves asking:

Is there an embodiment of the invention that falls within the scope of one claim, but not the other? If there is such an embodiment, then identical subject matter is not defined by both claims and statutory double patenting would not exist.

MPEP § 804(II)(A).

Claims 1-9 of the present application and Claim 2 of the '854 patent are directed to an inkjet printing apparatus. Both Claim 2 of the '854 patent and Claim 1 of the present application include limitations requiring a guide shim. However, Claim 2 of the '854 patent includes the following limitation requiring that the claimed apparatus have a specified minimum media sheet page margin. This limitation is not required by Claim 1 of the present application. Consequently, there is an embodiment of the invention that falls within the scope of Claim 1 of the present application but not Claim 2 of the '854 patent, so statutory double patenting does not exist for Claims 1-9.

Claims 10-16 of the present application and Claim 3 of the '854 patent are Claims 10-16 are directed to a method for advancing a media sheet along a media path through a print zone of an inkjet printing apparatus. Both Claims 10 of the present application and claim 3 of the '854 patent require a step for ejecting ink. However, Claim 3 of the '854 patent also includes a step requiring that the ejection of the ink be discontinued according to certain criteria. This additional limitation is not found in Claim 10 of the present application. Consequently, there is an embodiment of the invention that falls within the scope of Claim 10 of the present application but not

Claim 3 of the '854 patent, so statutory double patenting does not exist for Claims 10-16.

For these reasons, the Applicant's respectfully request that the Examiner withdraw the statutory type double patenting rejection.

DRAWINGS

The Examiner objected to the drawings noting that ref. 33 in Fig. 6 represents a roller while the ref. 33 in Figs. 3-5 and 8-9 represent a direction. The Examiner also noted that ref. 19 used in the drawings is not mentioned in the description. The description has been amended to address the Examiner's concerns. Specifically, description now specifically states that ref. 33 represents a direction that is perpendicular to the plane on which Fig. 6 is printed. The description has also been amended to refer in several locations to ref. 19.

INFORMATION DISCLOSURE STATEMENT

The Examiner noted that the Information Disclosure Statement filed 11/01.01 failed to include legible copies of each US and foreign patent. Specifically, the Examiner noted the absence of JP60048385, JP05112001, and JP07304167. A new information disclosure statement with copies of these Japanese patents accompanies this response.

CLAIM OBJECTIONS

The Examiner objected to Claim 4 noting a lack of antecedent basis for "said second surface." Claim 4 has been amended addressing the Examiner's concern.

REJECTIONS UNDER 35 U.S.C. § 103

The Examiner rejected Claims 1-16 under § 103(a) as being obvious. Various groups of Claims 1-16 were rejected citing two or more of the following references:

1. USPN 5,800,076 issued to Umeda;
2. USPN 5,019,839 issued to Watanabe;
3. USPN 4,821,049 issued to Eckle; and
4. USPN 5,719,602 issued to Hackleman.

To establish a prima facie case of obviousness, the Examiner must show some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; that there is a reasonable expectation of success; and that the prior art reference (or references when combined) teach or suggest all the claim limitations. MPEP § 2142 (*citing In re Vaeck*, 947 F.2d 488, (Fed. Cir. 1991)).

Claims 1-3, 5, 6, 8-11, and 14

The Examiner rejected Claims 1-3, 5, 6, 8-11, and 14 as being unpatentable over Umeda in view of Watanabe.

Claim 1: As amended Claim 1 requires, among others, the following limitations:

1. a guide shim located along the media path,
 - a. the guide shim having a guide surface extending at least from the roller, beyond the roller toward the print zone during printing,
 - b. the guide shim acting upon a portion of the media sheet between the roller and the print zone to keep the media sheet out of contact with the printhead; and
2. the guide shim capable of being advanced along the media path between a first position in which the guide shim is located upstream from the print zone along the media path and a second position in which at least a portion of the guide shim is located in the print zone; and
3. an advancing means operable to move the guide shim from the first position to the second position once the a trailing edge of the media sheet reaches a prescribed location along the media path, the guide shim being advanced with the media sheet.

The first limitation is original to Claim 1. The second limitation is new, and the third has been altered. Rejecting Claim 1, the Examiner contends that Umeda teaches the first limitation. The Examiner admits that Umeda does not teach a means for advancing a guide shim as required by the third limitation. Consequently,

Umeda also does not teach the second limitation requiring that the guide shim be moveable in a specific manner. The Examiner contends that Watanabe, figure 8, reference 27; column 10, lines 42-61 teach a means for advancing a guide shim. However, Watanabe does not teach a means for advancing the guide shim from a first position to a second position as defined by the second limitation above. Moreover, Watanabe does not teach a means for advancing the guide shim once a trailing edge of the media sheet reaches a prescribed location along the media path.

For these reasons, Claim 1 and Claims 2-9 which depend from Claim 1 are felt to distinguish over Umeda and Watanabe.

Claim 2: Depending from Claim 1, Claim 2 adds a limitation requiring that the advancing means comprise "means for advancing the guide shim into the print zone while a trailing edge of the media sheet moves into the print zone." The Examiner admits that Umeda does not teach this limitation. The Examiner does not contend that Watanabe explicitly teaches this limitation. Instead, the Examiner asserts:

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Watanabe et al into the invention of Umeda so that there is a movable guide shim which maintains a sheet under an inkjet printhead as the sheet moves past the printhead in a designated print zone. The motivation for the skilled artisan in doing so is to gain the benefit of decreasing cockle to enhance a printed image. The combination naturally suggests means for advancing the guide shim into the print zone while a trailing edge of the media sheet moves into the print zone.

While Umeda teaches a guide shim and Watanabe teaches a moveable guide shim, neither reference alone or in combination suggest moving a guide shim into a print zone let as the trailing edge of a media sheet moves into the print zone.

A careful review of Watanabe (figures 8 and 9 in conjunction with column 13, lines 7-56 and column 25, line 23 through column 26, line 69) reveals the following. Watanabe's guide shim (referred to as paper guide 27) is moved into a print zone prior to a media sheet reaching the print zone. See Watanabe, col. 13, lines 30-46. Watanabe's guide shim is then moved out of the print zone allowing a printing process. Watanabe, col. 13, lines 43-47. Watanabe's guide shim is never moved into the print zone along with the trailing edge of a media sheet. Doing so

would serve no purpose that can be discerned from the teachings of Watanabe or Umeda.

For these additional reasons, Claim 2 is felt to distinguish over Umeda and Watanabe.

Claim 6: Depending from Claim 1, Claim 6, as amended, requires that the advancing means include:

1. a sensor which detects position of the trailing edge of the media sheet and generates in response a sensor signal; and
2. an actuator, responsive to the sensor signal, and operable to move the guide shim along the media path between the first position and the second position.

The Examiner admits that Umeda does not each of these limitations. The Examiner does not contend that Watanabe explicitly teach both of these limitations. Instead, the Examiner agrees that Watanabe, col. 10, lines 17-24 teaches the first limitation while asserting:

The combination naturally suggests means for advancing the guide shim into the print zone while a trailing edge of the media sheet moves into the print zone; means responsive to the sensor signal for activating the advancing means to move the guide shim along the media path; and the step of detecting a trailing edge of the media sheet, and in which the step of advancing comprises advancing the guide shim along the media path in response to the detection of the trailing edge.

Neither Umeda nor Watanabe alone or in combination suggest a sensor for detecting the trailing edge of a media sheet or a means, responsive to that sensor, for activating a means for advancing the guide shim.

For these additional reasons, Claim 6 is felt to distinguish over the Umeda and Watanabe.

Claim 10: Being directed to a method, Claim 10 requires, among others, the following limitations:

1. moving the media sheet under a guide shim toward the print zone, the guide shim acting upon a portion of the media sheet to maintain flatness and advance accuracy of the media sheet as a trailing edge of the media sheet travels beyond the roller toward the print zone; and
2. advancing the guide shim along the media path into the print zone while a trailing portion of the media sheet moves into the print zone.

Rejecting Claim 10, the Examiner does not state which of Umeda or Watanabe teaches the first limitation. The Examiner admits that Umeda does not teach the second limitation. The Examiner contends that Watanabe, figure 8, reference 27; column 10, lines 42-61 does teach the second limitation.

A careful review of Watanabe (figures 8 and 9 in conjunction with column 13, lines 7-56 and column 25, line 23 through column 26, line 69) reveals the following. Watanabe's guide shim (referred to as paper guide 27) is moved into a print zone prior to a media sheet reaching the print zone. See Watanabe, col. 13, lines 30-46. Watanabe's guide shim is then moved out of the print zone allowing a printing process. Watanabe, col. 13, lines 43-47. Watanabe's guide shim is never moved into the print zone along with the trailing edge of a media sheet. Doing so would serve no purpose that can be discerned from the teachings of Watanabe or Umeda.

For these reasons, Claim 10 and Claims 11-16 which depend from Claim 10 are felt to distinguish over Umeda and Watanabe.

Claims 4, 12, 13, 15, and 16

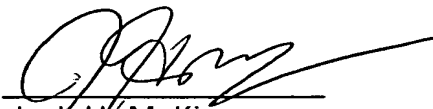
The Examiner rejected Claims 4, 12, 13, 15, and 16 as being unpatentable over Umeda in view of Watanabe and in further view of either Eckle or Hackleman. Claim 4 depends from Claim 1 and includes all the limitations of that base claim. For the reasons Claim 1 distinguishes over the cited art, so does Claim 4. Claims 12, 13, 15, and 16 each depend from Claim 10 and include all the limitations of that base claim. For the reasons Claim 10 distinguishes over the cited art, so do Claims 12, 13, 15, and 16.

CONCLUSION

In view of the foregoing remarks, the Applicant respectfully submits that Claims 1-16 are in condition for allowance. Consequently, early and favorable action allowing these claims and passing the application to issue is earnestly solicited. The foregoing is believed to be a complete response to the outstanding Office Action.

Respectfully submitted,
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